

Claims

1. High-alloy ferritic steel alloy, comprising, based on the alloy, at the most 1.00 percent by weight silicon, 18.0 to 22.0 percent by weight chromium, 1.80 to 2.50 percent by weight molybdenum, 0.01 to 0.10 percent by weight nitrogen, at the most 0.01 percent by weight titanium, at the most 0.01 percent by weight niobium, at the most 0.01 percent by weight aluminium and as the remainder substantially iron.

2. Steel alloy according to claim 1, comprising, based on the alloy, at the most 0.005 percent by weight titanium, at the most 0.005 percent by weight aluminium, at the most 0.005 percent by weight niobium, at the most 1.00 percent by weight manganese, at the most 0.04 percent by weight phosphorus and at the most 0.025 percent by weight carbon.

3. Steel alloy as claimed in claim 1 or 2, comprising, based on the alloy, 19.5 to 20.5 percent by weight chromium, 1.90 to 2.10 percent by weight molybdenum and 0.05 to 0.10 percent by weight nitrogen.

4. Steel alloy according to any one of the claims 1 to 3, comprising, based on the alloy, about 0.8 percent by weight silicon, about 20 percent by weight chromium, about 2 percent by weight molybdenum, about 0.05 percent by weight nitrogen and at the most 0.002 percent by weight titanium.

5. Steel alloy according to any one of the preceding claims, comprising, based on the alloy, at the most 0.10 percent by weight nickel.

6. Steel alloy according to any one of the preceding claims, comprising, based on the alloy, at the most 0.03 percent by weight sulphur.

7. Steel alloy according to claim 6, comprising, based
5 on the alloy, 0.015 to 0.03 percent by weight sulphur.

8. Casing part for watches, consisting of a steel alloy according to any one of the claims 1 to 7.

9. Casing part according to claim 8, in the form of a casing base or a casing shell.

10 10. Watch face consisting of a steel alloy according to any one of the claims 1 to 7.

11. Part for linked watch straps, consisting of a steel alloy according to any one of the claims 1 to 7.

12. Use of a steel alloy according to any one of the
15 claims 1 to 7 for the magnetic shielding of watches.

13. Method for the production of a casing part for watches, characterised in that a steel alloy in powder form according to any one of the claims 1 to 7, which however may optionally contain a lower level of nitrogen, is suspended
20 with a liquid binder, the suspension is introduced into a mould corresponding to the casing part, the binder is evaporated and the powder residue is sintered in the mould; with the proviso that if the alloy in powder form contains lower levels of nitrogen, the sintering is carried out in a
25 nitrogen-containing atmosphere.